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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/175,178	10/20/1998	SARVAR PATEL	13-1	6600

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WILLIAMS, MORGAN & AMERSON/LUCENT  
10333 RICHMOND, SUITE 1100  
HOUSTON, TX 77042

EXAMINER

PERUNGAVOOR, VENKATANARAY

ART UNIT PAPER NUMBER

2132

DATE MAILED: 10/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/175,178

Applicant(s)

PATEL ET AL.

Examiner

Venkatanarayanan Perungavoor

Art Unit

2132

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 October 1998 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 3/11/04
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Specifications*

1. On Page 1 and Page 2 the Applicant mentions  $\Pr[h(m_1) = h(m_2)] \leq \epsilon$ ,  $\Pr[h(m_1) - h(m_2) = \Delta] \leq \epsilon$ ,  $\Pr[h(m_1) = c_1, h(m_2) = c_2] \leq \epsilon$  then later mentions  $x_1$  and  $x_2$ . The Examiner believes the above  $m_1$  and  $m_2$  should be corrected to  $x_1$  and  $x_2$ .
2. On page 3 and the subsequent mention of modular operation should follow the following format:  $\text{mod } p, \text{mod } 2^l$ ; instead of  $\text{mod}_p, \text{mod}_2^l$ .
3. On Page 7(Ln 20- Page 8 Ln 2) and Page 8(Ln 11-26), the Examiner believes the  $\epsilon$  should not be there, which could easily be confused with the  $\epsilon$  stated earlier indicating a epilison, but believes the Applicant meant the "belongs in"  $\in$ .
4. On Page 8 Ln 26, Equation (9) contains  $|$ , which the Examiner believes is in error.
5. On Page 7 Equation (3), the Applicant mentions "n" in quotes, which is in error, the quotes around n should be removed.
6. On Page 8, Equation (6), is missing a terminating bracket  $']$ .

7. On Page 7, Equation (4) and Page 8 Equation (9) are not self revealing. The Examiner believes the applicant has omitted some steps in reaching the conclusion, or has taken a shortcut the Examiner (one with ordinary skill in art) is unaware of. Otherwise, Equation (4) and Equation (9) are unsupported. And further the conclusion of Equation (9) is incorrect, how does one get  $R^2$ ,  $R$  is being defined as a abelian group, and  $R^2$  has no meaning.

***Claim Rejections - 35 USC § 101***

8. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

9. The claimed invention is directed to non-statutory subject matter. The instant claims disclose method of shortened representation of a collection of bits which represents mathematical algorithms see MPEP 2106, IV, B, 1.

***Claim Rejections - 35 USC § 102***

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claim 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Schenier.

12. Regarding Claims 1-3, Schenier discloses a hashing method of Jueneman where

$$H_i = (H_{i-1} + M_i)^2 \bmod p \text{ see Page 457, and also IBC hash discloses the additional}$$
$$h_i = ((M_i \bmod p) + v) \bmod 2^n \text{ see Page 458.}$$

### ***Conclusion***

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Venkatanarayanan Perungavoor whose telephone number is 571-272-7213. The examiner can normally be reached on 8-4:30. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

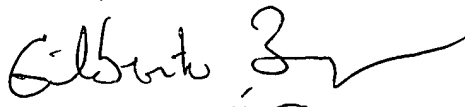
14. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Application/Control Number: 09/175,178  
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*i/p*  
10/3/2005

Venkatanarayanan Perungavoor  
Examiner  
Art Unit 2132

  
GILBERTO BARRON JR.  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100